

Date: Thu, 19 May 94 04:30:16 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #148
To: Ham-Ant

Ham-Ant Digest Thu, 19 May 94 Volume 94 : Issue 148

Today's Topics:

50-ohm Coax For A'Buryin
6m antenna suggestions (2 msgs)
?? Need help with an external short wave radio antenna ??
an antenna for 69Mhz ???
Baluns and dipoles
Experience with ASA 9209 antenna wanted
Ladder Line
PD design software for UHF/microwave beams
Rotor torque?
Using wood as a beam material
Wilson Rotators

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 16 May 94 23:08:12 GMT
From: dog.ee.lbl.gov!agate!iat.holonet.net!vectorbd!jp11@ucbvax.berkeley.edu
Subject: 50-ohm Coax For A'Buryin
To: ham-ant@ucsd.edu

Times has a rugged thing called Imperveon that has a special jacket
and flowable liquid to self heal.

--

-Jim Lill-

Vector Board BBS

jpll@vectorbd.com
wa2zkd@wb2psi.#wny.ny.usa.na

716-544-1863/2645
GEnie: ZKD

Date: 18 May 1994 16:34:55 GMT
From: usc!cs.utexas.edu!swrinde!emory!news-feed-2.peachnet.edu!news-feed-1.peachnet.edu!news.duke.edu!zombie.ncsc.mil!cs.umd.edu!newsfeed.gsfc.nasa.gov!trmmstocker.gsfc.nasa.gov!@@ihnp4.ucsd.edu
Subject: 6m antenna suggestions
To: ham-ant@ucsd.edu

I'd be appreciative of any suggestions people might have for "useful" 6m antennas that aren't real obvious. I would like a 3 element yagi but I don't think I can get away with it easily in my neighborhood. Does anyone have any experience with the 6m loop that AEA (I think) makes? My mode will be primarily SSB.

* Erich Franz Stocker *
* N3OXM *
* stocker@spsosun.gsfc.nasa.gov *
* *
* My ideas are my own and do not represent*
* the opinions of the federal government, *
* NASA or Goddard Space Flight Center. *

Date: 19 May 94 03:05:13 GMT
From: sdd.hp.com!col.hp.com!bobw@hplabs.hpl.hp.com
Subject: 6m antenna suggestions
To: ham-ant@ucsd.edu

Erich Franz Stocker (stocker@spsosun.gsfc.nasa.gov) wrote:
: I'd be appreciative of any suggestions people might have for "useful" 6m
: antennas that aren't real obvious. I would like a 3 element yagi but I
: don't think I can get away with it easily in my neighborhood. Does anyone
: have any experience with the 6m loop that AEA (I think) makes? My mode
: will
: be primarily SSB.

Maybe you mean the SQLLOOP from M2 antennas. Its a version of the classic halo that is in the shape of a square. I've got one,

seems to work.. can't provide any quantitative evidence. M2's phone is (209) 432-8873.

If you have a supporting structure (like a big tree), a standard dipole or J-pole (twinlead type) might work. Not a killer antenna on tropo but OK for sporadic-E.

Bob Witte / bobw@col.hp.com / Hewlett Packard PMO / KB0CY / (719) 590-3230

Date: 17 May 94 15:23:51 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!pipex!demon!
news@ucbvax.berkeley.edu
Subject: ?? Need help with an external short wave radio antenna ??
To: ham-ant@ucsd.edu

In article <16FB93603.R0264@vmcms.csuohio.edu> R0264@vmcms.csuohio.edu writes:

>
>
> I need to gather some info on building an antenna for short
> wave reception? Please excuse my ignorance, I am very new at
> this. Someone told me that All I need to do is connect a very
> long thin wire from an adjacent tree to the house and one from
> the ground and connect them into the adapter that goes into the
> external antenna plug. I have some questions:
>
> 1) How long should this wire be? Is it somehow related to the
> frequencies that I am interested in? What if I am interested in
> more than one?
>
> 2) should the wire be shielded or unshielded?
>
> 3) what should be the gauge of the wire? The thicker the better?
>
> 4) should the wire be the meshed type or a single thread?
>
>
> >>> Please include this message for reference <<<
> ===== S. Alavi [salavi@unity.ncsu.edu] (919)467-7909 (H) =====
> (919)856-3817 (W)

Make it as long as you can and put it up as high as you can get it. The rest doesn't really matter too much if you don't need to transmit.

Regards, Sean.

Date: 18 May 94 18:45:28 GMT
From: wang!dbushong@uunet.uu.net
Subject: an antenna for 69Mhz ???
To: ham-ant@ucsd.edu

rob@sunrae.uel.ac.uk (Rob Smith) writes:

>Could anybody help me with a design for a antenna for 69.300Mhz?
>What I am looking for is some kind of beam which is'nt too big
>The reson I require a beam is that where I operate the radio, half of
>my signal go's out to sea and is wasted.
>(if you are wondering about frequency, it's the UK sea cadet net)

I'd suggest that you look at designs for six-meter antennas, and
adjust the element lengths by a proportionate amount, roughly 25%
smaller. That should get you close enough to tweak it right in.

Dave, KZ10

--
Dave Bushong, Wang Laboratories, Inc.

Date: 18 May 94 14:09:38 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!darwin.sura.net!
news.Vanderbilt.Edu!news@ucbvax.berkeley.edu
Subject: Baluns and dipoles
To: ham-ant@ucsd.edu

In a former article we saw...

---begin former article---
From: tonyh6@aol.com (TonyH6)
Subject: Baluns and dipoles
Date: 17 May 1994 01:30:07 -0400

I'm trying to construct dipole antenna for my FM transmitter. A few of the
books I've looked at suggest using a balun transformer between the poles.

My question. Where do I find one (or how do I make one) and is it really
necessary.

Any suggestions, (especially on what parts to buy) would be greatly appreciated.

Tony

---end former article---

and PFEIFFEM@ctrvx1.Vanderbilt.Edu (PFEIFFEM_1) comments...

Unless you are going to use a directional antenna a balun would not be needed. People have for years have been scared by balun makers that RF on the outside of the coax will cause RFI. Well, thats argumentative. Besides that, baluns can cause RFI if they saturate and crack!

So if you only use a dipole for an antenna, don't worry about using a dumb balun.

Buy the way, what freq is your FM transmitter set for anyway? The VHF/UHF bands have antennas already constructed for them. You can't home brew a better VHF/UHF antenna than you can buy.

Date: 18 May 1994 07:51:48 -0600

From: mnemosyne.cs.du.edu!nyx10.cs.du.edu!not-for-mail@uunet.uu.net

Subject: Experience with ASA 9209 antenna wanted

To: ham-ant@ucsd.edu

I can't seem to get to archives for this group, sorry if this is an old topic.

I need an omni-directional 2m base antenna for FM simplex. In the past I've built J-Poles & been happy with them, but I'm curious about ads I see for the \$36.73 A.S.A. 2m "co-linear multiwave" antenna.

Any experience out there? The materials would seem to almost be worth the price IF IT WORKS.

Alternately, any suggestions for a good "install & forget" quality base 2m antenna?

Thanks. /s/ Bill

Date: 18 May 94 21:17:30 GMT

From: agate!howland.reston.ans.net!math.ohio-state.edu!usc!nic-nac.CSU.net!news.Cerritos.edu!news.Arizona.EDU!nelson.as.arizona.edu!

hlester@ucbvax.berkeley.edu

Subject: Ladder Line
To: ham-ant@ucsd.edu

In article <2rbsp6\$1j6@search01.news.aol.com> leen2kks@aol.com (Lee N2KKS) writes:
>You can get this ladder line from: The Radio Works (804)-484-0140. They are a
>mail order firm in Portsmouth, Va

Y0u can get far better quality ladder line from The Wireman, in South Carolina.
He advertises (usually) in QST, at least - I don't have his 800 number handy,
sorry. Yeah - free call, whereas Radio Works is not. Call 1-800-555-1212 for
the number.

Howard

Date: 18 May 94 14:52:14 GMT
From: spsgate!mogate!newsgate!news@uunet.uu.net
Subject: PD design software for UHF/microwave beams
To: ham-ant@ucsd.edu

It seems to me that I vaguely remember seeing a post
referring to software for designing multi-element
beams for VHF/UHF use, but I cannot find any references
in any of my saved files.

Does anyone know what software is available and where (ftp)?
I can do either Mac or PC, preferable Mac. I have NEC, but
I don't have a manual and have no idea how to use it.

Thanks,
dave dicarlo
r14793@waccvm.sps.mot.com

Date: Tue, 17 May 1994 12:08:11 -0400
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!math.ohio-state.edu!news.acns.nwu.edu!
ftpbox!mothost!lmpsbbs!NewsWatcher!user@network.ucsd.edu
Subject: Rotor torque?
To: ham-ant@ucsd.edu

In article <uHkFmc2w165w@w2up.wells.com>, barry@w2up.wells.com (Barry
Kutner) wrote:

> I presently have a TH7 with a Cushcraft 2 el 40 about 8 feet above it,
> and using a Tailtwister rotor. I want to push the mast up a bit to
> increase the spacing between the two antennas to minimize interactions.

> Now, The rotor is about 8 feet down inside the top section. Is there a
> way to calculate (or any other way) how close to the top of the tower I
> can have the rotor without having excess torque on it?
> 73 Barry
>
>
> =====
> Barry N. Kutner, W2UP Usenet/Internet: barry@w2up.wells.com
> Newtown, PA Packet Radio: W2UP @ WB3JOE.#EPA.PA.USA.NA
> Packet Cluster: W2UP >K2TW (FRC)
>

The torque on the rotor does not depend on the length of the vertical pipe mast, just on the dimensions of the antennas being rotated. The antenna manufacturer can easily calculate the rotational torque for any given wind speed and provide you with the values.

The issue you should be worried about is the overturning moment of the antennas at the point where the mast enters the top of the tower. This is the material stress parameter that will bend the mast over so that your beams point up, down or sideways.

--
Karl Beckman, P.E. < Genius may have its limitations, but >
Motorola LMPS- Analog Data < stupidity is not thus handicapped. >
 < - Elbert Hubbard >
The statements and opinions expressed here are not those of Motorola Inc.
Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

Date: Wed, 18 May 1994 06:21:34 GMT
From: pa.dec.com!nntpd2.cxo.dec.com!iamu.chi.dec.com!little@decwrl.dec.com
Subject: Using wood as a beam material
To: ham-ant@ucsd.edu

In article <2rbnn4\$lus@uqcspe.cs.uq.oz.au>, tonyg@cs.uq.oz.au (Tony Gedge) writes:
|>I was just looking at some Quagi designs in the ARRL Antenna Handbook, and
|>I was wondering how one would have to modify these antennas if a different
|>beam support material was used (e.g. wood instead of plexiglass or
|>steatite [I think I spelled them correctly]) Are there any general rules
|>of thumb that are used, or is it just a case of "try it and see"?

In re-reading your post, it occurred to me that you are probably looking at microwave Quagis as the VHF/UHF Quagis already call for wood booms I think. At microwave frequencies, it's possible that the resins in the wood may have some effect on the antenna. All in all though, I suspect that what little effect there is can be easily compensated for by adjusting the driven element's

length and the spacing between the driven element and the first reflector.

What bands are you considering?

73,
Todd
N9MWB

Date: 18 May 94 13:10:13 GMT
From: dog.ee.lbl.gov!agate!boulder!tali.hsc.colorado.edu!wom.HSC.Colorado.EDU!
debert@ucbvax.berkeley.edu
Subject: Wilson Rotators
To: ham-ant@ucsd.edu

A friend of mine is going to give me two old Wilson rotators. Both work except that they no longer indicate direction. He says the carbon coated ring that acts as pot with a wiper is bad. Suggestions on how to correct the problem?

End of Ham-Ant Digest V94 #148
